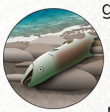
Climate Change Vulnerabilities

Because of the economic, geographic, and biological diversity of California, vulnerabilities to anticipated future climate changes are best assessed on a regional basis. A few of the key climate change vulnerabilities are indicated. For more in-depth descriptions please go to: http://www.water.ca.gov/climatechange/docs/CA_Climate_Science_and_Data_Final_Release_June_2015.pdf.

North Lahontan • Increased air and water temperatures would place additional stress on sensitive ecosystems and species. • Higher temperatures and longer dry seasons would increase wildfire risk.

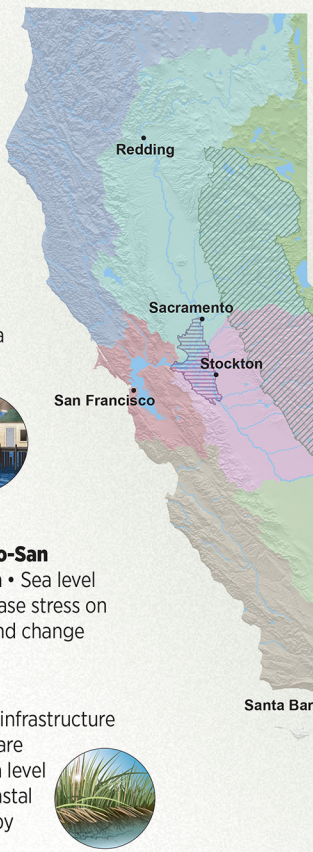
Mountain Counties • Loss of snowpack storage may reduce reliability of surface water supplies • Snowpack reduction may have significant impacts on the water-related tourism industry.

North Coast • Longer drought periods could reduce local fractured-rock groundwater supplies. • Sea level rise may make tidal marshland susceptible to more frequent, longer and deeper flooding.



Sacramento River • Increased air and water temperatures would place additional stress on sensitive ecosystems and species. • Loss of snowpack storage may reduce reliability of surface water supplies and result in greater demand on groundwater resources.

San Joaquin River • Increasing temperatures and variable precipitation patterns would affect agricultural crops by reducing winter chill-hours, increasing extreme heat days and increasing evapotranspiration.



San Francisco Bay • Sea level rise may increase the susceptibility of tidal wetlands to more frequent, longer and deeper flooding.

South Lahontan • Higher temperatures and longer dry seasons would increase wildfire risk and impair water quality in local streams and lakes. • Reduced snowpack would impact the winter-dependent economy which also supports disadvantaged communities.

Sacramento-San Joaquin Delta • Sea level rise may increase stress on Delta levees and change water quality.

Central Coast • Coastal infrastructure and nearshore ecosystems are vulnerable to increasing sea level and storm surges, while coastal aquifers could be affected by increasing salinity intrusion.

South Coast • Extreme precipitation events may result in greater flood risk, debris flows, and degradation of habitat. • Higher temperatures and longer dry seasons would increase wildfire risk and impair water quality in local streams and lakes.

Tulare Lake • Loss of snowpack storage may reduce reliability of surface imported water supplies and replenishment of local supplies, and result in greater demand on groundwater resources. • Increased air and water temperatures would place additional stress on sensitive ecosystems and species.

Colorado River • More frequent and longer droughts would reduce imported water supply reliability and decrease local water quality and habitat.